



U.S. Department
of Transportation

**Federal Highway
Administration**

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January 3, 2005

Programmatic Section 4(f) Evaluation Anthony Lakes Highway OR PFH 133 (3)

INTRODUCTION

The Western Federal Lands Highway Division (WFLHD) of the FHWA, in partnership with the U.S. Forest Service (Forest Service) and Baker County Road Department, is proposing road improvements on phase 3 of the Anthony Lakes Highway. The Anthony Lakes Highway is located in the northwest corner of Baker County, Oregon. The route begins at the North Powder River Bridge and continues for approximately 2.5 miles to the boundary of the Wallowa-Whitman National Forest (see figure 1).

The Elkhorn Wildlife Area (EWA) is located north of Anthony Lakes Highway and is directly adjacent to approximately 1,200 feet of the proposed project beginning at the North Powder River Bridge. The EWA is owned and managed by the Oregon Department of Fish and Wildlife (ODFW) and qualifies for protection as a wildlife refuge under section 4(f) regulations.

Historic-era artifacts were recovered from the vicinity of a demolished cabin (35BA1077) adjacent to the Anthony Lakes Highway near Little Antone Creek. Since the site is potentially eligible for the National Register of Historic Places, it would be considered at section 4(f) property.

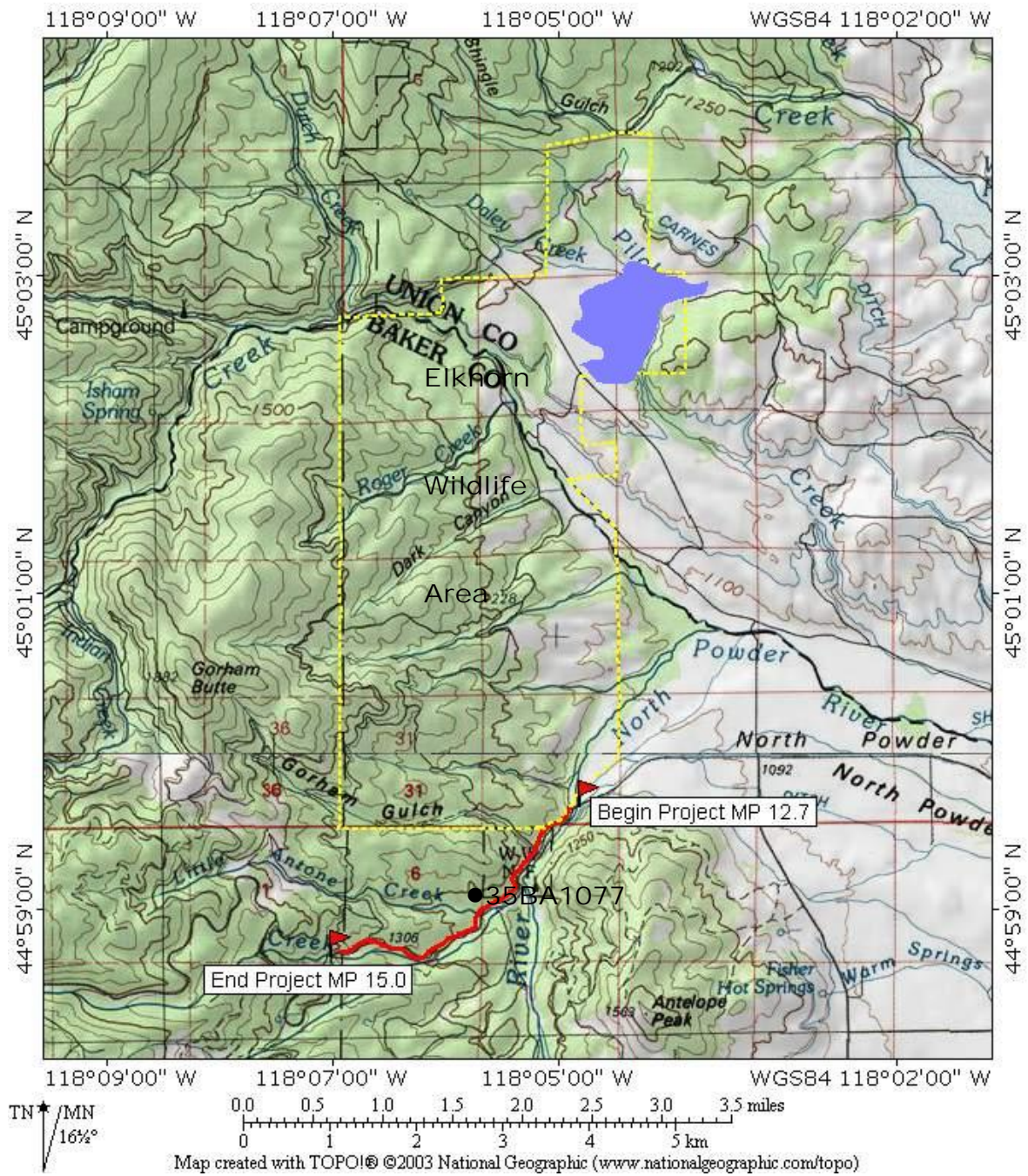
PURPOSE AND NEED

This project is the third of a three-phase project to improve the Anthony Lakes Highway. The project begins at the City of Haines at the junction of U.S. Highway 30 and extends west, north, and then west again along Baker County Route (CR) 1146 and Forest Road (FR) 73 for approximately 16 miles to the boundary of the Wallowa-Whitman National Forest. Construction was completed on phases 1 and 2 in the fall of 2003. The first two phases improved approximately 13 miles of highway from the Haines city limit to the east end of the North Powder River Bridge. Phase 3 proposes to continue roadwork over the bridge to the national forest boundary. The total length of the phase 3-project is approximately 2.5 miles.

The Anthony Lakes Highway is a two-lane rural major collector route that serves a range of traffic types.

The road is the primary access route from the east to the Anthony Lakes area of the Wallowa-Whitman National Forest and is the only winter access to the Anthony Lakes Mountain Resort. It is part of the Elkhorn Drive National Forest and State Scenic Byway, which provides a loop drive from Baker City through the Elkhorn Mountains and to the historic communities of Sumpter and Granite. The route receives year-round use, with the highest levels occurring in the winter and on weekends in connection with the Anthony Lakes Mountain Resort. According to the Forest Service, highway use has been increasing since its designation as a scenic byway in 1989. Use of the highway is expected to increase further with the proposed expansion of the Anthony Lakes Mountain Resort and implementation of the Baker County rural economic development strategy, which emphasizes growth in the tourist industry.

Figure 1. Proposed Project Route



The existing asphalt pavement along the proposed project route is in fair to poor condition, with an extensive amount of block cracking, longitudinal cracking, and raveling. The rutting and potholes in the pavement prevent proper roadway drainage, which can create standing water and icy conditions in the winter. The grade is very steep (up to 13%) just east of the national forest boundary. The horizontal alignment is generally winding, with sharp curves and limited sight distance in a few areas. Anecdotal evidence indicates that the curve at MP 14.3 has a history of accidents. The paved road width is inconsistent and varies from 18 to 22 feet with gravel or partially paved shoulders of 2 feet or less. Steep embankment slopes, especially those adjacent to the river and Antone Creek, do not have guardrails and are potentially hazardous. Rockfall onto the road from existing steep rock cuts is a continual problem.

The purpose of the proposed project is to provide a safe and durable roadway for year-round access to the national forest and its multiple use opportunities; provide safe access for the current and projected winter traffic traveling to the expanded Anthony Lakes Mountain Resort; enhance mobility for the increasing numbers and types of vehicles traveling the Elkhorn Drive Scenic Byway. The objectives of the proposed project are to: 1) Improve roadway structure to provide a durable surface that supports current and projected highway uses. 2) Provide a roadway width and alignment that incorporates current standards for safety and drivability. 3) Improve roadway and roadside conditions that have led to erosion problems throughout the project route.

PREFERRED COURSE OF ACTION

The FHWA proposes to reconstruct the project route to a total roadway width of 24 feet, consisting of two 10-foot lanes and 2-foot shoulders. For the most part, the proposal involves only minor changes in the existing road alignment; however, major alignment changes (of nearly 65 feet) are likely from station 370+00 to station 395+00. The purpose of the alignment change would be to provide a roadway width and alignment that incorporates current standards for safety and drivability. Design speed would be 35 miles per hour. The project would also upgrade the rail system components on the North Powder River Bridge (Station 300+00) to meet current standards.

Proposed road work adjacent to the EWA includes replacing the rail system on the North Powder River Bridge, reconstructing the roadway to a total width of 24 feet, paving the informal parking areas located on both sides of the highway at the entrance to the EWA, and realigning the curve between stations 303+54 and 308+09.

Proposed roadwork adjacent to the historic site includes reconstructing the roadway to a total width of 24 feet.

SECTION 4(f) PROPERTIES

Wildlife Area

The EWA is located on the eastern flanks of the Elkhorn Mountain Range. The EWA is managed to mitigate the loss of traditional big game winter range and alleviate big game damage to adjacent agricultural lands through habitat management and a supplemental feeding program.

The EWA consists of approximately 9,600 acres of property; of this total, approximately 6,600 acres are owned by ODFW, 1,700 acres are public lands under management agreement, and 1,300 acres are leased private lands. The area was purchased in 1971 with funds from the State of Oregon and the Federal Aid in Wildlife Restoration Act (the Pittman-Robertson Act). The purchased portion of the area was formerly used as a ranch.

Vegetation in the EWA consists largely of open stands of ponderosa pine grading into sagebrush and grassland in the lower elevations. A large reservoir is located on the north end of the property. The area is managed by ODFW primarily to benefit big game animals such as elk and deer and to minimize conflicts caused by big game on privately owned rangeland and agricultural crops. Management objectives are to: 1) mitigate the loss of traditional big game winter range; 2) provide supplemental feed

for wintering big game; 3) provide habitat for big game and other wildlife indigenous to the area; 4) provide hunting and other wildlife-oriented recreation opportunities for the public.

Historic Site

Historic archaeological site 35BA1077 is below the surface of the ground. It is comprised of a demolished 1920's cabin and a sparse scatter of historic-era artifacts associated with the cabin. The scatter of artifacts is located within the construction limits of the proposed project; however, professional evaluation of the property has documented that the historic cultural materials found within the proposed project limits have been displaced by previous road construction and lack significance due to a loss of integrity. The intact historic cultural deposits associated with the cabin site lie approximately 40 feet outside of the proposed project limits. .

POTENTIAL IMPACTS FROM THE PROPOSED PROJECT

Wildlife Area

The EWA is located north of the Anthony Lakes Highway and is directly adjacent to approximately 1,200 feet of the proposed project route beginning at the North Powder River Bridge (station 300+00). The North Fork of the Powder River is directly adjacent to the south side of the project route in this area. An EWA entrance road leading to a dispersed camping area, hay barn, and wildlife feeding site intersects the highway near station 302+50. The EWA property is fenced from the beginning of the project to the gated entrance road. The fence extends past the entrance road for another 100 feet where it turns upslope and ends. The total length of the fence is approximately 350 feet. The fence and gate are located within the construction limits of the proposed project.

The deeded right-of-way for the Anthony Lakes Highway does not follow the existing road alignment in most places along the EWA frontage. The EWA property line lies close to the edge of the existing roadway at the beginning of the project. Near station 303+54 the property line and road alignment diverge, with the two being nearly 100 feet apart for a short distance. Beginning near station 309 the property line and road alignment turn back toward one another and by station 310+10, the property line intersects the edge of the existing roadway. From here, the property line runs close to the center of the existing roadway for approximately 120 feet before it turns west, leaving the road alignment for the last time. Because of these right-of-way discrepancies, any road construction in the vicinity of the EWA entrance road and along the last approximately 170 feet of the EWA frontage would impact the wildlife area. The impacted area totals approximately 0.3 acres.

Historic Site

The proposed project would not adversely affect historic site 35BA1077, since it is located approximately 40 feet outside of the construction limits. The WFLHD received concurrence from the Oregon State Historic Preservation Officer (SHPO) on its No Adverse Effect determination for site 35BA1077 on July 23, 2004.

Since the existing road lies adjacent to a portion of the site containing a scatter of historic-era artifacts, any change to the current roadway configuration could potentially affect these historic resources. Since the site is adjacent to the proposed project route it qualifies for section 4(f) protection.

PROGRAMMATIC SECTION 4(f) APPLICABILITY

Section 4(f) of the U.S. Department of Transportation Act, codified as 23 USC Section 138 and 23 CFR Section 771.135, states that the FHWA may not grant approval for a project if it uses land that is a publicly owned park, recreation area, wildlife and waterfowl refuge, or any significant historic site unless (1) there is no prudent and feasible alternative to the use of such land; and (2) any such program or project includes all possible planning to minimize harm to these resources.

The FHWA has prepared a programmatic Section 4(f) evaluation titled *Final Nationwide Section 4(f) Evaluation and Approval for Federally Aided Highway Projects with Minor Involvement with Public*

Parks, Recreation Lands and Wildlife and Waterfowl Refuges. The proposed project, as it relates to the EWA, meets the eligibility criteria established in the document as described in this programmatic Section 4(f) evaluation because of the following reasons:

- 1) The proposed project is designed to improve the operational characteristics, safety, and physical condition of an existing highway facility on essentially the same alignment.
- 2) An Environmental Impact Statement (EIS) has not been prepared for this project (see the Finding of No Significant Impact).
- 3) The EWA is a publicly owned state wildlife area located adjacent to the existing highway.
- 4) The 0.3 acres of EWA land being converted to transportation use is less than 1 percent (0.003 percent) of the total wildlife management area, and the location and amount of land to be used does not impair the use of the remaining EWA land.
- 5) The proximity impacts of the proposed project on the remaining EWA land do not impair the use of the wildlife management area for its intended purpose.
- 6) The EWA manager has agreed, in writing, with the assessment of the impacts of the proposed project on the EWA and the proposed mitigation for these lands.
- 7) Since a portion of the funding for the purchase of the EWA came from the Federal Aid in Wildlife Restoration Act (the Pittman-Robertson Act), the U.S. Fish and Wildlife Service (USFWS) has reviewed the assessment of impacts and proposed mitigation. The USFWS does not object to the land conversion.

The FHWA has prepared a programmatic Section 4(f) evaluation titled *Final Nationwide Section 4(f) Evaluation and Approval for Federally Aided Highway Projects with Minor Involvement with Historic Sites*. The proposed project, as it relates to the historic site, meets the eligibility criteria established in the document as described in this programmatic Section 4(f) evaluation because of the following reasons:

- 1) The proposed project is designed to improve the operational characteristics, safety, and physical condition of an existing highway facility on essentially the same alignment.
- 2) Historic property 35BA1077 is potentially eligible for the National Register of Historic Places and the existing highway is adjacent to the site.
- 3) The project does not require the removal or alteration of historic buildings, structures or objects on the historic site. The project does not require the disturbance or removal of archaeological resources that are important to preserve in place rather than to remove for archaeological research. The determination of the importance to preserve in place is based on consultation with the State Historic Preservation Officer (SHPO).
- 4) The impact on historic site 35BA1077 resulting from the use of the road is considered minor. The word minor is narrowly defined as having either a “no effect” or “no adverse effect” on the qualities that qualify the site for eligibility to the National Register of Historic Places (when applying the requirements of Section 106 of the National Historic Preservation Act and 36 CFR Part 800).
- 5) The Advisory Council on Historic Preservation (ACHP) has not objected to the determination of “no adverse effect” for historic site 35BA1077.
- 6) The SHPO has agreed, in writing, with the assessment of impacts of the proposed project and the proposed mitigation for historic site 35BA1077.
- 7) An Environmental Impact Statement (EIS) has not been prepared for this project (see the Finding of No Significant Impact).

ALTERNATIVES AND FINDINGS

The following alternatives were considered in the environmental assessment for this project in addition to the preferred course of action.

Do Nothing Alternative

No Action

Under this alternative, no improvements would be made to phase 3 of the Anthony Lakes Highway. Baker County would continue to maintain the roadway; however, the existing pavement is near the end of its service life and would continue to deteriorate rapidly.

The current poor pavement condition consisting of potholes and raveling pavement as well as sharp curves, inconsistent roadway width, and steep grades contribute to unsafe driving conditions. Although reported accidents along the project route have been low, deteriorating road conditions could compromise driving safety, and over time, could lead to an increase in accidents, especially as traffic volumes increase. Further, the very minor impact on the EWA and the limited nature of any constructive use of the historic site are so minimal, and the community impact from improving the road is so substantial, that the comparison is of an extraordinary magnitude. The deteriorating pavement, variable width, steep grade, and sharp curves create significant hazards that will be addressed by this use and the impacts are extraordinarily minor in comparison to the benefit of such improvements.

Therefore, the No Action Alternative is not feasible or prudent because it would not correct deteriorating roadway conditions that could compromise driver safety.

Improvement without Using the Adjacent Section 4(f) Lands

3R Road to a Uniform 22-foot Width with No Realignment

This alternative would resurface, restore and rehabilitate (3R) the existing road to a uniform 22-foot width with no realignment of sharp curves or reduction of steep road grades. This alternative would include digging out failed pavement substructure, placement of new aggregate base and asphalt pavement, graveling road shoulders, culvert replacement, installation of guardrails where warranted, road striping, new signs, and revegetation of disturbed areas.

This alternative would improve roadway structure but would not resolve the safety problems related to sharp curves or steep grade, nor would it improve steep cutslope conditions that have led to erosion and rockfall problems. This alternative would also give the Anthony Lakes Highway a less uniform width. Coming from the east, the Anthony Lakes Highway would change width from 28 feet along phases 1 and 2, to 22 feet through phase 3, then to 24 feet beginning at the national forest boundary. The varying roadway widths could create a safety hazard for unsuspecting drivers. Therefore, this alternative is not feasible or prudent because it would not meet the identified need to address the safety concerns on the road. The safety problems associated with this alternative, including varying road widths, erosion and rock fall problems, are of an extraordinary magnitude when compared with the minimal use of the EWA and historic site.

Realign and Widen the Road Away From the EWA and Historic Site

To avoid use of the adjacent wildlife refuge, the road could be widened and realigned to the south side of the existing alignment in the area adjacent to the EWA. In this area, the North Fork of the Powder River is located directly adjacent to the project route on the south. Near station 307, the North Powder River shares an embankment with the roadway on the south side and there are steep cut slopes along the north side of the roadway. In other locations, the road is within 30 feet of the river. To gain needed roadway width and avoid building in the river, walls would have to be built on the fill-side of the road. The base of these walls would encroach on the North Powder River 100 year-floodplain.

The North Powder River is migrating habitat for federally listed bull trout. The river is also on the Oregon 303(d) list as water quality-impaired due to high temperature. In order to build walls in the

floodplain and widen the road toward the river, some streamside vegetation would have to be removed. Removal of streamside vegetation would reduce shading, resulting in an increase in water temperature and deterioration of bull trout habitat. Removal of streamside vegetation would be counter to FHWA's responsibilities under the Clean Water Act and Endangered Species Act. Wall building would increase the cost of the road project by an estimated \$200,000.00 to \$300,000.00

To avoid use of the historic site, the road would have to be realigned to the south of its current location beginning at approximately station 345+00, blending back into the existing alignment around station 355+00. The new alignment would be located entirely within private property. The alignment would involve one additional crossing of Little Antone Creek and could involve removal of a small business and residence.

Given the additional cost and substantial environmental and social impacts involved in shifting the road alignment to avoid a very small amount of 4(f) property, this alternative is neither feasible nor prudent. The environmental, social, and economic problems associated with this alternative are of an extraordinary magnitude when compared with the minimal use of the EWA and historic site.

Alternative on New Location

Construct First 1.2 Miles of Road on New Alignment on the South Side of the North Powder River

This alternative would avoid both the EWA and historic site 35BA1077 by shifting the alignment of the first approximately 1.2 miles of the proposed project route to the south side of the North Powder River. The existing road alignment would also have to be maintained for access to the EWA and private property.

This alternative would involve construction of 1.2 miles of new road and three new bridges; one over the North Powder River at the beginning of the project, a second over the North Powder River near the Rocky Ford Campground, and a third over Antone Creek. Approximately 0.75 mile of the route would pass through three different private properties and 0.4 mile would pass through an isolated section of the Wallowa-Whitman National Forest. At least three buildings on the Loennig and Daniels property are located in the area of the potential realignment. These buildings include a small business and a residence.

In addition to the new road alignment, the existing roadway would also have to be kept open in order to access the EWA and private property located on the north side of the river. Keeping the existing road open would involve additional maintenance for the County, and the road surface and cutslopes would be an additional source of sediment into the North Powder River.

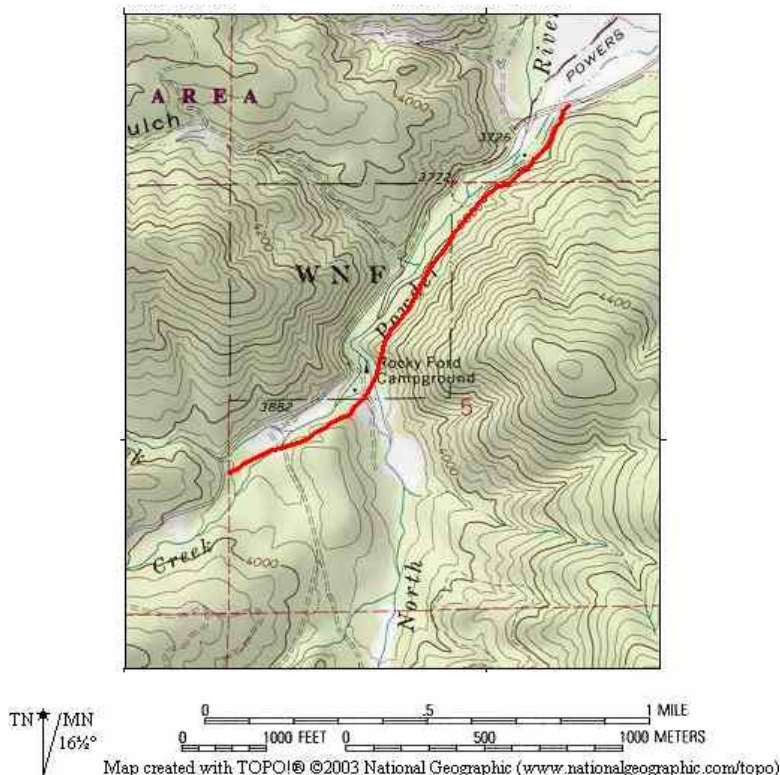


Figure 2. New Alignment on the South Side of the North Powder River

Road construction over the new route would involve clearing the area of trees, brush, and other

vegetation, removing stumps and surface boulders, and grading over approximately 17 acres. The terrain along part of the proposed route is moderately steep; therefore, road construction in this area could involve high road cuts and fills. New bridge construction could potentially impact water quality and fish habitat. The alternative could also involve possible purchase and condemnation of a private residence and business. Compared to the small amount of Section 4(f) land avoided, this alternative would be very costly, adding a minimum of \$2,000,000.00 to the project.

It is not feasible or prudent to avoid Section 4(f) lands by constructing on a new alignment because doing so would cause substantial adverse environmental and social impacts, and would substantially increase the cost of the project. Although the new alignment would avoid both the wildlife area and the historic site, it would require three additional bridge crossings over the North Powder River and Antone Creek and could substantially impact private property including possible removal of privately owned buildings. The environmental, social, and economic problems associated with this alternative are of an extraordinary magnitude when compared with the minimal use of the EWA and historic site.

MEASURES TO MINIMIZE HARM

Wildlife Area

The FHWA will implement the following measures to minimize harm to the EWA:

- 1) The roadway transitions from a 28-foot width (for the previous project) to a 24-foot width (for the proposed project) at the North Powder River Bridge.
- 2) The 1:3 foreslope design has been reduced from the standard 1:4 foreslope in order to further reduce roadway width.
- 3) The proposed road alignment in this area closely follows the existing road alignment.
- 4) Road cutslopes will be designed in accordance with geotechnical recommendations to achieve slope stability and sculpted to mitigate visual impacts and expedite revegetation.
- 5) Best management practices will be used to control erosion and sedimentation.

In addition to the above measures to minimize harm, the FHWA and ODFW have agreed to the following measures in exchange for use of wildlife refuge property for transportation purposes.

- 1) The EWA entrance road will be graveled and sculpting from the intersection of the Anthony Lakes Highway to the hay storage barn and feeding area.
- 2) A new gate will be installed at the EWA entrance, and the right of way fence between the North Powder River and the EWA entrance will be replaced.

Historic Site

The following actions will be undertaken to minimize harm to historic site 35BA1077:

- 1) Consultation with the SHPO and ACHP was undertaken, resulting in concurrence with a recommendation of No Adverse Effect for site 35BA1077.
- 2) The construction limits will be fenced through site 35BA1077 to prevent inadvertent entry and disturbance of intact historic deposits during construction.
- 3) The WFLHD will identify the historic site on project plans as an “environmental avoidance area” which is to be avoided during construction. The contractor will be briefed concerning the requirement to keep all personnel and equipment out of the site.
- 4) The project engineer and inspector will monitor compliance during construction.
- 5) The project engineer will document site conditions before and after construction.

COORDINATION

Wildlife Area

The proposed project has been coordinated with the Wildlife Area Manager, the ODFW State Office, and the U.S. Fish and Wildlife Service.

Historic Site

This project has been coordinated with the SHPO, the U.S Forest Service Wallowa-Whitman National

Forest, Oregon Department of Transportation, Baker County and the ACHP. This document was reviewed by the SHPO.

DETERMINATION

Wildlife Area

The *Final Nationwide Section 4(f) Evaluation and Approval for Federally Aided Highway Projects with Minor Involvement with Public Parks, Recreation Lands, and Wildlife and Waterfowl Refuges* applies to this project because the project would have minor impacts to a wildlife refuge that are unavoidable, and measures have been taken to minimize harm.

Historic Site

The *Final Nationwide Section 4(f) Evaluation and Approval for Federally Aided Highway Projects with Minor Involvement with Historic Sites* applies to this project in that:

- 1) All of the alternatives set out in the findings section of the nationwide evaluation have been fully evaluated;
- 2) The findings in the nationwide evaluation are clearly applicable to this project and there are no feasible and prudent alternatives that avoid the use of 4(f) land;
- 3) The project complies with and incorporates the measures to minimize harm section of the nationwide evaluation;
- 4) The Oregon State Historic Preservation Office was consulted and has agreed to the measures to minimize harm as implemented;
- 5) Project records and this 4(f) document clearly show that the 4(f) impacts created by this project are in compliance with the guidelines established by the nationwide programmatic 4(f) evaluation.

CONCLUSION

Based upon the above considerations, the project is covered by the nationwide programmatic 4(f) evaluation. There is no feasible and prudent alternative to the minor use of Elkhorn Wildlife Area and historic site 35BA1077. The proposed action includes all possible planning to minimize harm to section 4(f) lands resulting from such project use.

RECOMMENDED BY:


George Fekaris, Design Operations Engineer

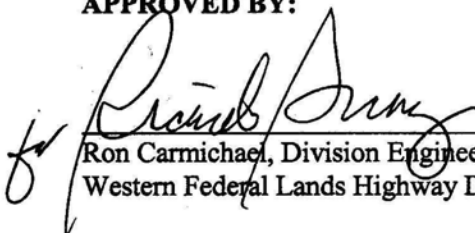
1/4/05
Date

ASSIGNED BY:


for Rich Barrows, Acting Project Development Engineer

1/4/05
Date

APPROVED BY:


for Ron Carmichael, Division Engineer
Western Federal Lands Highway Division

1/5/05
Date